



Public Health Service  
DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control  
and Prevention (CDC)

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TO: State and Territorial Epidemiologists  
State and Territorial Public Health Laboratory Directors

THROUGH: Director, Division of Bacterial and Mycotic Diseases

SUBJECT: Surveillance for Botulism  
Summary of 2004 Data

Attached is the summary of laboratory-confirmed and epidemiologically-linked botulism cases from January 1 through December 31, 2004. The information provided has been compiled from reports submitted by state epidemiologists, the CDC botulism laboratory, the Infant Botulism Treatment and Prevention Program (in conjunction with the California Department of Health Services), CDC epidemiologists and the CDC botulism antitoxin release database. If the attached 2004 data from your state are incomplete or inaccurate, please contact:

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The Foodborne and Diarrheal Diseases Branch (FDDB) maintains intensive surveillance for cases of botulism in the United States. All data regarding antitoxin releases and laboratory confirmation of cases are recorded annually by CDC. Epidemiologists from FDDB are available 24 hours a day to answer calls from state and local health departments or physicians treating potential cases of botulism at (770) 488-7100.

We plan to make this report publicly available on our website:  
[http://www.cdc.gov/ncidod/dbmd/diseaseinfo/botulism\\_a.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/botulism_a.htm) under Botulism, additional information. We look forward to continuing to work together toward the control of this important public health problem.

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## **APPENDIX A**

### **Summary of Botulism Cases Reported in 2004**

A total of 138 cases of botulism intoxication were reported to CDC in 2004. Among the 14 cases of foodborne intoxication, toxin type A accounted for 12 (86%) cases and toxin type E for 2 (14%) cases. The median age of patients was 41 years. No deaths were reported. There were 2 multi-case outbreaks. They were caused by pruno, a bootleg prison-made alcoholic beverage, and home-canned mushrooms, respectively.

There were 91 reported cases of infant botulism. Toxin type B accounted for 54 (59%) cases, toxin type A for 36 (40%) cases, and toxin type F for 1(1%) case. The median age of patients was 15 weeks; one death was reported.

There were 28 reported cases of wound botulism. Toxin type A accounted for all but two cases. All occurred in injecting drug users. The median age of patients was 48 years; no deaths were reported.

There were 4 reported cases of treatment-related botulism resulting from a common-source outbreak through injection by the same person and from the same source. All 4 cases received cosmetic injections of a high-dose, unlicensed botulinum toxin A product not intended for human use. The case-patients were 34, 40, 52, and 53 years old.

There was 1 reported case of botulism of unknown source. Toxin type F accounted for this case, and the case patient was 26 years old. There were no reported cases of adult colonization botulism.

**Table 1. Summary of Reported Botulism Cases - 2004**

**Foodborne**

14 cases

Median age: 41 years (range: 19-68 years)  
Death: 0 confirmed, 1 case without information  
Gender: 8 (57%) male, 6 (43%) female  
Toxin type: 12 (86%) type A, 2 (14%) type E

2 multi-case outbreaks

**Infant**

91 cases

Median age: 15 weeks (range: 1 - 52 weeks)  
Death: 1 confirmed, 1 without information  
Gender: 52 (57%) male, 39 (43%) female  
Toxin type: 36 (40%) type A, 54 (59%) type B, 1 (1%) type F

**Wound**

28 cases

Median age: 48 years (range: 27 - 57 years)  
Death: 0 confirmed, 0 without information  
Gender: 24 (86%) male, 4 (14%) female  
Toxin type: 25 (89%) type A, 2 (7%) type B, 1 (4%) not typeable

**Treatment-Related**

4 cases constituting a single multi-case outbreak

Median Age: 45 years (range: 34-53 years)  
Death: No deaths reported  
Gender: 2 (50%) male, 2 (50%) female  
Toxin type: 4 (100%) type A

**Unknown Source**

1 case

Age: 26 years  
Death: No death reported  
Gender: male  
Toxin type: type F

**Table 2. Cases of Botulism by State and Type  
January 1 - December 31, 2004**

<u>State/District</u>	<u>Foodborne</u>	<u>Infant</u>	<u>Wound</u>	<u>Other</u>	<u>Total</u>
AK	1				1
AZ		1			1
CA	6	37	21		64
DC		1			1
DE		2			2
FL		1		4*	5
HI		1			1
IA		1			1
ID		1			1
KS		1			1
KY		1			1
MD		6			6
MN		1			1
MT	1	1			2
NE		1			1
NH		1			1
NJ	1	1			2
OH	1	2			3
OR	4	1	1		6
PA		15			15
SC		1			1
TN		1			1
TX		3	1		4
UT		2			2
VA		4			4
WA		2	5	1**	8
WV		2			2
<b>Total:</b>	<b>14</b>	<b>91</b>	<b>28</b>	<b>5</b>	<b>138</b>

\* Treatment-related source

\*\* Unknown source

**Table 3. Cases of Foodborne Botulism by Month (N=14)  
January 1 - December 31, 2004**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Vehicle</u>	<u>Death</u>
January	OR	68	Female	A	multiple home-canned foods	Unknown
	OH	56	Female	A	home-canned tomatoes	No
April	AK	39	Female	E	seal meat/fat	No
May	NJ	41	Female	E	salted fermented fish	No
July	CA*	unknown	Male	A <sup>†</sup>	pruno <sup>††</sup>	No
	CA*	25	Male	A	pruno	No
	CA*	35	Male	A	pruno	No
	CA*	20	Male	A	pruno	No
	CA*	19	Male	A	pruno	No
	MT	47	Female	A	home-canned asparagus	No
August	CA	40	Male	A	unknown	No
September	OR	19	Male	A	stew	No
December	OR*	51	Male	A	home canned mushrooms	No
	OR*	57	Female	A	home canned mushrooms	No

\*Cases involved in multicase outbreak

†Toxin type derived from epidemiologically-linked case

†† Bootleg prison-made alcoholic beverage

**Table 4. Cases of Infant Botulism by Month (N=91)  
January 1 - December 31, 2004**

<u>Month</u>	<u>State</u>	<u>Age (weeks)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
January	CA	14	F	B	N
	CA	15	M	B	N
	PA	26	M	B	N
	WA	27	M	A	N
	PA	26	M	A	N
	CA	21	M	A	N
	UT	20	F	A	N
February	WV	8	F	B	N
	CA	22	M	A	N
	CA	14	M	B	N
	PA	18	F	B	N
	OH	6	F	B	N
	MN	20	M	B	N
	VA	4	F	B	N
March	TX	9	M	A	N
	WV	4	M	B	N
	CA	52	F	B	N
	MD	5	F	B	N
	PA	21	F	B	N
	CA	28	M	A	N
	PA	24	M	B	N
April	CA	4	F	A	N
	MT	38	M	A	N
	VA	3	F	B	N
	UT	18	M	A	N
	CA	22	M	B	N
	PA	23	F	B	N
	VA	14	M	B	N
May	CA	9	F	A	N
	CA	4	M	B	N
	PA	13	F	B	N
June	CA	6	F	A	N
	KY	14	F	B	N
	DE	19	F	B	N
	CA	4	M	B	N
	CA	3	M	B	N
	PA	3	M	B	N
	CA	31	M	A	N
	WA	6	M	B	N
	CA	9	M	B	N
	PA	1	F	B	N
July	CA	24	M	A	N
	CA	23	M	A	N
	ID	10	M	A	N
	CA	4	F	B	N
	CA	4	F	B	N
	AZ	22	M	B	N
	MD	21	M	B	N
	OR	7	M	B	U

**Table 4. Cases of Infant Botulism by Month (N=91)  
January 1 - December 31, 2004**

August	CA	15	F	A	N	
	SC	15	F	A	N	
	TX	24	F	A	N	
	CA	11	M	B	N	
	VA	10	F	A	N	
	NJ	10	F	B	N	
	MD	18	F	B	N	
	PA	27	F	B	N	
September	CA	16	M	A	N	
	CA	4	M	B	N	
	DE	4	F	B	N	
	PA	6	F	B	N	
	IA	2	M	F	Y**	
	PA	26	F	B	N	
	NH	2	M	B	N	
	MD	26	M	A	N	
	TN	14	F	B	N	
	OH	19	F	B	N	
	KS	4	M	B	N	
	October	CA	3	M	B	N
		MD	22	M	B	N
		CA	16	F	A	N
CA		22	M	A	N	
NE		15	F	A	N	
CA		5	F	A	N	
CA		20	M	A	N	
November	FL	18	M	A	N	
	CA	14	F	A	N	
	CA	3	M	A	N	
	HI	13	F	B	N	
	TX	15	M	A	N	
	PA	20	M	B	N	
	PA	27	M	B	N	
	MD	13	M	B	N	
December	CA	18	M	A	N	
	CA	29	M	A	N	
	PA	25	M	B	N	
	CA	20	M	A	N	
	CA	7	F	A	N	
	DC	25	M	B	N	
	CA	26	M	B	N	
	CA	32	F	A	N	

\*\*Patient died from complications arising from *C. difficile* colitis.

**Table 5. Cases of Wound Botulism by Month (N=28)  
January 1 - December 31, 2004**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Exposure*</u>	<u>Death</u>
March	CA	37	Male	A	IDU	No
	CA	54	Male	A	IDU	No
	CA	55	Male	B	IDU	No
	WA	51	Male	A	IDU	No
	WA	52	Male	A	IDU	No
June	CA	33	Male	A	IDU	No
	CA	34	Male	A	IDU	No
	CA	27	Male	A	IDU	No
July	CA	54	Male	unknown <sup>†</sup>	IDU	No
	CA	53	Male	A	IDU	No
	CA	53	Male	A	IDU	No
August	TX	49	Male	A	IDU	No
	CA	49	Male	A	IDU	No
	CA	55	Male	A	IDU	No
September	WA	49	Female	A	IDU	No
	CA	50	Male	A	IDU	No
October	CA	42	Male	A	IDU	No
	CA	47	Female	A	IDU	No
	CA	56	Male	A	IDU	No
	WA	50	Male	A	IDU	No
November	CA	52	Male	A	IDU	No
	CA	53	Male	A	IDU	No
	CA	57	Male	A	IDU	No
December	WA	43	Male	A	IDU	No
	CA	43	Male	A	IDU	No
	CA	49	Female	A	IDU	No
	CA	52	Male	A	IDU	No
	OR	50	Female	B	IDU	No

\* IDU = injection drug user

† Serum quantity not sufficient for toxin typing

**Table 6. Cases of Treatment-Related Botulism (N=4)  
January 1 - December 31, 2004**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
November	FL*	53	Female	A	No
November	FL*	52	Male	A	No
November	FL*	40	Male	A	No
November	FL*	34	Female	A	No

\*Cases involved in single common-source outbreak

**Table 7. Cases of Botulism of Unknown Source (N=1)  
January 1 - December 31, 2004**

<u>Month</u>	<u>State</u>	<u>Age (years)</u>	<u>Gender</u>	<u>Toxin Type</u>	<u>Death</u>
April	WA	26	Male	F	No